# Aquilegia Newsletter of the Colorado Native Plant Society

"... dedicated to the appreciation and conservation of the Colorado native flora"

Volume 19 Number 2

April-June 1995

# Conserving Colorado's Flora: Threatened Habitats and Conservation Tools 1995 Annual Meeting: Call for Posters, Papers, and Nominations

The 1995 Colorado Native Plant Society Annual Meeting will take place October 7-8 in Fort Collins at Colorado State University. Hosted by the Colorado Natural Heritage Program, the theme this year is "Conserving Colorado's Flora: Threatened Habitats and Conservation Tools". The meeting will begin Saturday morning with a keynote address, and proceed throughout the day. One afternoon session will be devoted to short presentations summarizing Society field trips and other interesting field season findings. The day will conclude with a benefit auction and hors d'oeuvres. Sunday morning we will take a field trip to a local area of botanical interest.

### **CALL FOR PAPERS**

Society members are invited to bring posters or exhibits for display. Please contact us if you would like to share some of your summer findings in either a shorttalk (10 minutes or less) or by setting up a poster. Contact Elizabeth Powell, Colorado Natural Heritage Program, 103 Natural Resources Building, Colorado State University, Fort Collins, CO 80523 970-491-1309.

## **CALL FOR NOMINATIONS**

### **Board of Directors**

This fall, five of the Society's Board of Directors will have finished their terms. If you are interested in becoming a board member or know of someone else who is, please submit your recommendation to a member



Penstemon grahamii Artist: Kaye H. Thorne

of the Nominating Committee (see below). Board members serve a two year term beginning in October. Each member is expected to assist with the business of the Society, and may be asked to chair or reactivate one of the Society's committees. Board members should plan on attending approximately six meetings over the course of the year, usually on Saturday mornings somewhere in the Fort Collins or Denver area. Elections will be held at the annual meeting in Fort Collins on October 7. Nomi-

nating Committee members are Tom Ranker (492-5074) and Mark Gershman (443-9365).

### Society Honors and Awards

Each year at the annual meeting, the Society honors its own members and other members of the community with a variety of awards. The Awards Committee is soliciting your recommendations for the following awards:

### Honorary Lifetime Membership

This award is presented to members of the Society who have made significant lifelong commitments to the appreciation and conservation of Colorado's native flora through their work with the Society. Since the inception of the Society, this award has been presented to about a dozen people. The award includes a free lifetime membership in the Society and a framed certificate with a custom artwork depicting an appropriate native plant.

### Special Merit Award

This award is intended for members who - continued on following page

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### Annual Meeting - contined from page 1

have gone above and beyond the usual project commitment, and significantly advanced the Society's goals by virtue of a discrete project sponsored by the Society or direct representation of the Society's interests. The honoree is recognized at the annual meeting and is presented with a plaque.

### Certificate of Recognition

This award is meant to recognize the activities of non-members who have made significant contributions to the preservation or understanding of Colorado's native plants through their professional work or avocations. Like the Special Merit Award, the Society seeks to honor individuals who have exceeded the standard requirements of their job and have demonstrated exceptional tenacity and effectiveness. The honoree is recognized at the annual meeting, presented with a plaque, and a letter of commendation from the Society's Board is sent to the recipient's supervisor.

Submit your nominations for awards to Tom Ranker, Mark Gershman, or Carol Spurrier (see listing on page two for phone numbers).

# Aquilegia

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# Colorado Native Plant Society



The Colorado Native Plant Society is a non-profit organization dedicated to the appreciation and conservation of the Colorado native flora. Membership is open to all with an interest in our native plants, and is composed of plant enthusiasts both professional and non-professional.

Please join us in helping to encourage interest in enjoying and protecting Colorado's native plants. The Society sponsors field trips, workshops and other activities through local chapters and statewide. Contact the Society, a chapter representative, or committee chair for more information.

### Schedule of Membership Fees

Life\$2	250
Supporting\$	50
Organization\$	30
Family or Dual\$	15
Individual\$	12
Student or Senior\$	8

### Membership Renewal/Information

Please direct all membership applications, renewals and address changes to the Membership Chairperson, Colorado Native Plant Society, P.O. Box 200, Fort Collins, CO 80522. Please direct all other inquiries regarding the Society to the Secretary at the same address.

# Aquilegia

Aquilegia is published four to six times per year by the Colorado Native Plant Society. This newsletter is available to members of the Society and to others with an interest in native plants. Contact the Society for subscription information.

Articles from Aquilegia may be used by other native plant societies or non-profit groups if fully cited to author and attributed to Aquilegia.

### **Newsletter Contributions**

Please direct all contributions to the newsletter

Nina Williams 976 Cherryvale Road Boulder, CO 80303 E-Mail:NCybele@aol.com

Short items such as unusual information about a plant, a little known botanical term, etc. are especially welcome. Camera-ready line art or other illustrations are also solicited.

Please include author's name and address, although items will be printed anonymously if requested. Articles submitted on disks (IBM or Mac) are appreciated. Please indicate word processing software and version.



### Officers

President	Tom Ranker	492-5074
Vice-President	Chris Pague	491-1309
Secretary	Mark Gershman	443-9365
Treasurer	Carol Scheid	493-1367

### **Board of Directors**

Ann Armstrong (95)	Boulder	494-0545
David Buckner (95)	Boulder	494-3231
Kathy Carsey (96)	Boulder	449-3041
Janet Coles (95)	Boulder	440-0595
Mark Gershman (96)	Boulder	443-9365
Andrew Kratz (95)	Lakewood	238-6317
Tamara Naumann (95)		
Chris Pague (96)	Lyons	492-4719
Tom Ranker (96)		
Carol Spurrier (96)		

### **Chapter Presidents**

Boulder	Lynn Riedel	666-6687
Metro-Denver	Jeff Dawson	722-6758
Fort Collins	. Mike Scott	490-1788
Yamparika	Reed Kelley	878-4666
San Juan	Gretchen	
	Van Reyper	835-3268
Southwest	Leslie Stewart	882-7241

### Committees

Conservation	Janet Coles 440-0595	
and	Kathy Carsey 449-3041	
Editorial	Nina Williams 499-9858	
and	Tamara Naumann 374-2504	
and	William A. Weber . 492-6171	
Education	Andrew Kratz 238-6317	
Field Trips	Rick Brune 238-5078	
and	Jeff Dawson 722-6758	
Field Studies	Mary Edwards 233-8133	
Hort/Restoration	Tina Jones 794-2647	
and	Ann Armstrong 494-0545	
Legislative Affairs.	VACANT	
Membership	Myrna Steinkamp 226-3371	
and	Sue Martin 226-3371	
Publicity	VACANT	
Workshops	VACANT	

# ANNOUNCEMENTS

# ACTION ALERT

# Letters Needed to Jack Ward Thomas Regarding Proposed Changes to the National Forest Management Act Which Affect Rare Plants

Attention Everyone! You have only until July 12 to respond to a serious situation. In mid-April, proposed new forest management rules were published in the Federal Register. The new rules would gravely alter the way our National Forest biologists manage for rare species and habitats. Among other things, protection would be removed for plants or animals at risk locally, and new language would make it difficult to protect habitats from fragmentation.

What can you do? Go, at once, to your nearest Federal Building or Forest Service Office and get a free copy of the Federal Register for April 13, "Part II Department of Agriculture Forest Service." It is long, but please read as much of it as you can, paying special attention to page 18921 and the following pages. Note that "Option I" is the most dangerous option in that it drastically cuts back on protection for locally rare species.

Please express what these changes would mean for the health and diversity of our forest ecosystems by writing, by July 12, to the Director of Ecosystem Management at the address on page 18886 of the Register or to Jack Ward Thomas at: USDA Forest Service, PO Box 96090, Washington DC 20090-6090. Your help is needed! For more information, contact Glen or Rhoda Love of the Native Plant Society of Oregon at (503) 345-6241. Thank you.

# **VOLUNTEER OPPORTUNITIES**

# **Bonny Prairie Under Siege!**

Approximately two acres of exotic and aggressive yellow sweet clover (*Melilotus officinalis*) threaten native plant communities at Bonny Prairie State Natural Area in Yuma County. The Colorado Natural Areas Program is seeking helping hands to pull the clover to avoid using chemicals as a control technique. Admission to Bonny State Park and camping will be free for participants—fishing and birdwatching at the park are usually good. June 17-18 is the tentative date to do the deed, but since the best time to pull clover is after a rain and before flower, June 24-25 is an alternate date. Interested persons should call Jim Von Loh at (303) 866-3203 x331 to register and find out more details.

# Native Plant Experts Needed

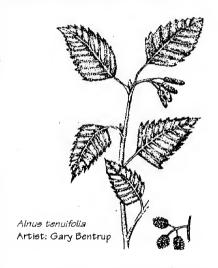
The Southern Rockies Ecosystem Project (SREP) works to protect biological diversity in the southern Rockies. Botanists are needed this summer to help SREP conduct plant surveys and assess ecological conditions of grazing allotments on public lands. Five volunteers will identify plants in the Rio Grande and other national forests for four days or two weekends this summer. SREP and other conservation groups will use the results to recommend protective stipulations in grazing permit renewals or to request cancellation of grazing permits in areas needing recovery. The field work will also be used to develop landscape scale recovery plans for native plant and animal species. If you are interested in sharing your expertise in southwestern Colorado this summer, call Roz McClellan at (303) 447-9409 or Lara Soward at (303) 443-0788.

# <sup>b</sup>Pare Plants on the Pawnee?

The Colorado Natural Areas Program is seeking people to help the Pawnee National Grassland staff search for Ute ladies'-tresses orchids, *Spiranthes diluvialis*, and the Colorado butterfly weed, *Gaura neomexicana* ssp. *coloradensis*, in August. Please call Janet Coles at (303) 866-3203 x330 and leave a message if interested.

# Job Opening Plant Ecologist

The City of Boulder Open Space Department is hiring a full-time plant ecologist to help manage its 25,000+ acre system. Duties include evaluating impacts of open space uses and conditions (recreation, agriculture, exotic species, etc.) to vegetation, developing forestry management plan, community classification and mapping, overseeing and conducting research, evaluating sites for natural area designation, monitoring and managing rare plants and communities, reclamation, restoration, education, and much more. For details call Cathy Vaughn-Grabowski at (303) 441-3441.



# Wetlands Workshop:

"Structure, Function and Regulations"

The Rocky Mountain Chapter of the Society of Wetland Scientists, in cooperation with several other organizations, is sponsoring an afternoon of discussions on July 6 and a field trip on July 7 in Gunnison. The focus of the session is threefold: 1) brief presentations of research in western Colorado, 2) review of regulations, and 3) review of several wetlands in the Gunnison area.

Cost of the workshop is \$30 and includes a box lunch on Saturday. For more information and a copy of the agenda, please call Lynn Cudlip at (970) 641-2337 x248 or 641-1451, or Gay Austin at (970) 641-0471.

# **Adopt a Rare Plant Program**

The Colorado Natural Heritage Program (CNHP) is continuing the volunteer-based Adopt a Rare Plant Program to update information on the location and condition of selected rare plant species. Much needed site-specific information on many of Colorado's rare and threatened species is lacking. The primary objective of the program is to assess, through a statewide network of volunteers, the current status of selected rare species and to determine which population sites would become conservation priorities for The Nature Conservancy, state and federal government, and other conservation groups.

Volunteers "adopt" plant species selected by CNHP staff. Equipped with information and maps, volunteers visit sites where a particular species has previously been documented, updating records from as far back as the 1930's! Volunteers also search potential new population records and evaluate sites where populations are found, recording population size, degree of natural and human-caused disturbance, land use, and threats.

Survey forms completed by volunteers in the field are used by CNHP to update the Biological Conservation Database, and to make conservation recommendations. Volunteers help direct conservation time, efforts and dollars on the priority areas.

For more information about the Adopt a Rare Plant Program, contact Susan Spackman (970) 491-2992 or Julie Burt (970) 223-3407.

# Double-take on Anticlea

# William A. Weber Ron C. Wittmann

In Volume 18 Number 4, page 5, we reported the discovery of a second species of Anticlea from McClure Pass. It turns out that Anticlea coloradensis, the species we took it for, is a synonym of A. elegans. A synopsis of the genus is under way by Robert Sivinski, who brought us up to date on our find. The actual identity makes our discovery much more exciting, for the plant turned out to be Anticlea virescens, our first guess, a Mexican species that reaches as far north as southern Arizona and Catron County, New Mexico. In searching the herbarium, we find that we have specimens from Grand, Pitkin, Gunnison, and Routt counties. In addition to the characteristics mentioned earlier, the corolla is not only small, but campanulate and the stamens are exserted. In A. elegans the corolla has the tepals widely spreading and the stamens are not exserted.

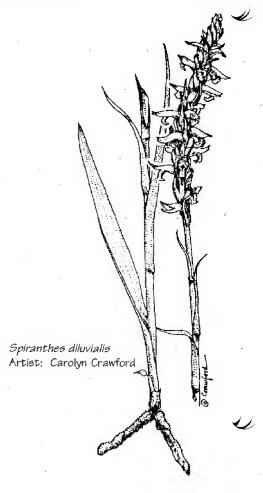
# **Endangered Species Update**

In the most recent developments on the Endangered Species Act (ESA), Senator Slade Gorton (R-WA) has introduced a bill designed to virtually disable the Act. Gorton admits that his bill was drafted by lobbyists for the logging, mining, and utility interests who want the ESA repealed.

One provision of the Gorton bill makes allowance for captive-bred populations to meet conservation goals. Viable populations would no longer have to be maintained in the wild. The presence of a rare Astragalus or Penstemon in the Denver Botanical Garden could undermine efforts to protect native populations. Another provision of the bill would make it almost impossible to designate or protect critical habitat. Protection of habitat is an important component of rare species recovery.

The current loss of species is a telltale sign that our environment is in danger. What happens to our native plants and animals forewarns of threats to humans. Threats to bald eagles and peregrine falcons from the pesticide DDT alerted scientists to the importance of keeping this chemical out the food chain, a move that protects the health of human mothers and babies, as well as birds.

Reasonable people who care deeply about the environment must speak out. An irrational backlash against "environmentalists" and government programs is sweeping across the West. Forest Service offices in Nevada have been bombed, Fish and Wildlife Officers in Idaho have been intimidated by armed individuals, and death threats are a common occurrence to environmental activists in New Mexico. If those of us who love the Colorado flora do not rise in its defense, the debate will become increasingly polarized to the detriment of both native plants and the institutions that protect them.



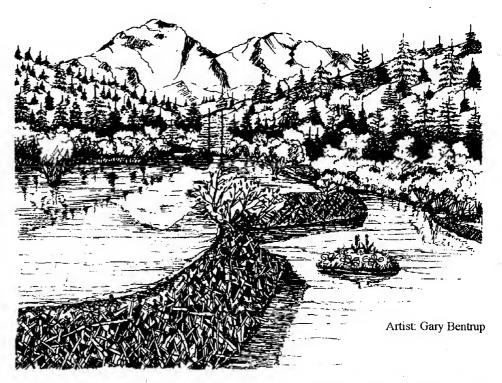
# Searching for Aletes humilis in Boulder County

# ✓ Richard Scully Mary Jane Howell

Mention the North St. Vrain canyon and it brings to mind steep trails to favorite fishing spots on the river. Or maybe a cross country hike to a viewpoint of the wild canyon and a chance to glimpse a herd of bighorn sheep. A few lucky people, upon reaching the edge of a cliff facing northwest towards Longs Peak, will look down and remark on an attractive cushion plant with bright yellow flowers. They will have discovered a rare member of the parsley family, Aletes humilis. This plant, also known as the Larimer aletes, makes its home in several canyons and on a number of mountain tops, rock knobs, and ridges in the foothills of northern Boulder County.

Our search for Aletes humilis is somewhat more focused. As volunteers for the Colorado Natural Heritage Program's Adopt-A-Rare-Plant program, we started by visiting the Aletes humilis population found by Betsy Neely in the North St. Vrain canyon. With topographic maps in hand and a search image based on that population, one can predict where Aletes humilis can be found with some consistency. Of course, there is also a fair amount of standing atop cliffs and looking out to say "Wow - look at all that bare rock way over there. Let's go there next." Following this systematic approach, we mapped 13 new occurrences of Aletes humilis in Boulder County. We found an average of one new locality for every two long days of hiking, including the time spent searching negative localities to define the margins of the plant's range.

Aletes humilis has been sighted at elevations between 7,000 and 8,800 feet in the drainages of North, Middle and South St. Vrain Creeks, as well as that of James Creek near Jamestown and the Little Thompson River near Pinewood Springs in southern Larimer County. Populations of Aletes humilis ranging in size from a few hundred to thousands of individuals can be found on Nugget Hill, Fairview Peak, Coffintop Mountain, Button Rock Mountain, North Sheep Mountain, Moose Mountain and the north-facing canyon walls of North, Middle, and South St. Vrain Creeks. With more time and effort,



we expect many additional localities can be mapped in this region.

Finding Aletes humilis usually involves a strenuous climb to a spectacular viewpoint, because it resides around large, west or north-facing rock outcrops that extend above the forest and are exposed to the harsh west winds. The bedrock is most commonly Silver Plume granite, but it grows on metamorphic rocks as well. Although each population is centered on a large outcrop, a good number of individuals also occur in the forest duff below the rocks, and on the thin grus soil on the windward side of the hill-tops.

Some of the plants most commonly associated with Aletes humilis are: Pinus ponderosa, Pseudotsuga, Pinus flexilis, Jamesia, Ribes, Juniperus communis, Heuchera, Geranium, Potentilla fissa, and Potentilla effusa. Of these, Heuchera is the one whose habitat requirements most closely match Aletes humilis, although Heuchera is much more widespread. In the eastern portion of its range, Aletes humilis overlaps the range of its closest local relative, the more common Aletes acaulis. It also is interesting

to note that we have not found *Potentilla* rupincola occurring with *Aletes humilis* in Boulder County or southern Larimer County, as we have in northern Larimer County.

A good time to appreciate Aletes humilis is during the peak flowering season, which in Boulder County occurs in April and May, depending on elevation and snow cover. At the higher end of its range it is the first plant to flower, appearing as yellow clumps up to 12 inches across on bare patches between the snowdrifts. Even outside the blooming season the tidy bright green foliage makes it easy to spot and in winter the dried-tan foliage is readily identified by the characteristic cushion shape.

The very thing that makes finding Aletes humilis a reward, a clamber over rugged terrain, is what affords it considerable natural protection from human activity. Even though off-road vehicles are bringing people into frequent contact with it at a site above the North St. Vrain canyon, this tenacious rock dweller is settled snugly in Boulder County.

# FIELD TRIPS - 1995

# NEW ELK PARK WETLAND

Leader: Doug Owen and John Sanderson Meeting Place: McDonalds 17500 S. Golden Rd. in Golden, CO.

Saturday, July 22, meet between 7:30 and 8:00 a.m.

Trip will leave promptly at 8:00 a.m.

This field trip is cosponsored by the Rocky Mountain Chapter of the Society of Wetland Scientists. Elk Park wetland is one of the largest and best preserved fens close to the Denver Metropolitan Area. As a peatland, it is one of Colorado's rare physical features, for peatlands cover only about 0.3% of the land area in the State. Radiocarbon dating suggests that it stared to form about 10,000 years ago in a nivation basin. Stratigraphic data tell us that the wetland has looked much the same as it does today throughout its history and has not gone through serial stages of succession. Come hear more about it when we visit this treasure.

The wetland is located northwest of Central City at 10,400 ft. so dress appropriately. Also, portions of the dirt road that provides access can be rough, so don't drive your sports car. Bring a lunch if you plan to stay past noon.

# SQUARE TOP LAKE and SILVER DOLLAR LAKE

Leader: Bob Powell

Meeting Location: Square Top Lake and Silver Dollar Lake Parking Areas Saturday & Sunday, July 8 & 9, 1995, 8:15 a.m.

Bob Powell will lead two one-day field trips to alpine areas near Guanella Pass (south of Georgetown). Participants are welcome for one or both days. On Saturday, we will walk the trail to Square Top Lake; highlights will include fell field plants, grass meadows, and wetlands. We'll visit Silver Dollar Lake on Sunday; this trip will feature a few steep climbs, a variety of saxifrages, and grass-of Parnassus (*Parnassia*). On both days, we'll hike to the end of the trail first and then work back—to avoid thunderstorms.

Meet by 8:15 each morning so the trip can begin promptly at 8:30. Each walk will be about four miles round-trip, beginning at 8:30 a.m. and returning about 1:00 p.m., depending on weather conditions. Be prepared for alpine conditions. The parking area for Square Top Lake is on top of Guanella Pass. The parking area for Silver Dollar Lake is at the beginning of Naylor Road, just below (north of) the Guanella Pass campground. Camping is available at the Clear Lake and Guanella Pass Forest Service campgrounds on the Guanella Pass Road.

To register, call Jeff Dawson (303) 722-6758 (h) or (303) 740-2793 (o).

NEW

# PHANTOM CANYON PRESERVE

Leader: The Nature Conservancy Saturday, July 15, 10:00 a.m.to 2:00 p.m.

The Nature Conservancy's Phantom Canyon Preserve protects the last major stretch of wild river in eastern Colorado that is not disturbed by road building. This beautiful, untracked canyon on the Cache la Poudre River north of Fort Collins protects one of the few known sites for Aletes humilis and also the rare Potentilla rupincola. Mid- and shortgrass prairie with abundant wildflowers dominate the canyon slopes and upland while the canyon bottom supports a lush, riparian community.

The Preserve is home to nesting golden eagles along with black bear, mountain lion, pronghorn antelope, and prairie rattlesnakes. It is the northernmost limit of the range for piñon pine, Ord's kangaroo rat, and fringed-tailed myotis bat.

Phantom Canyon is 30 miles north of Fort Collins. Access is by reservation only and field trips are limited. This trip is limited to 15 people so register early. A \$3.00 fee to help coverexpenses will be collected by The Nature Conservancy. The trail to the bottom of the canyon is on a hot, south-facing slope. Bring water, lunch, and protection from the elements.

To register, call Rick Brune at (303) 238-5078.

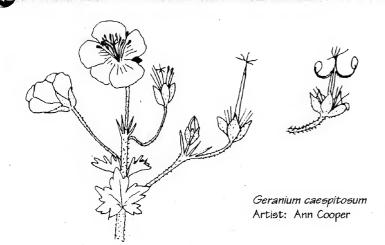
### HIGH PLAINS RIPARIAN PLANT COMMUNITIES

Leaders: Mike Scott and Jonathan Friedman
Meeting Location: East of Denver—see directions below
Saturday, June 24, 1995, 9:00 a.m.

Mike Scott and Jonathan Friedman of the National Biological Service will lead a field trip to cottonwood forests along ephemeral streams east of Denver. The trip will highlight the importance of infrequent, large floods in establishing riparian cottonwoods, the effects of groundwater declines on cottonwood survival, the native flora of high plains riparian forests, and the impacts of exotic plants, including Russian olive and leafy spurge. Participants will gain an understanding of how physical processes affect vegetation. This is a joint field trip with the Society of Wetland Scientists. Limit 20 people.

Meet at 9 a.m. Take I-70 east of Denver to Tower Rd. (Exit 286), take Tower Rd. south about 1 mi. to Colfax, east on Colfax 2 mi. to Piccadilly, south on Piccadilly to its end at Hwy. 30, then south or Hwy. 30 to Quincy Ave., east on Quincy 5 miles. Meet just beyon a creek crossing, on the south side of Quincy Avenue, at a dirt road with two steel gates and a sign saying "Recycled Materials." To register, call Mike Scott (970) 226-9475 or Jonathan Friedman (970) 226-9318.

# FIELD TRIPS - 1995



# **SNOW MESA**

Leader: Janet Coles Meeting Location: Spring Creek Pass Saturday, July 15, 1995, 6:30 a.m.

Snow Mesa is an alpine plateau in the shadow of the Continental Divide in the eastern San Juan Mountains. Like much of the region, Snow Mesa is composed of 20-30 million year old layers of lava and volcanic ash. What makes this area interesting is that (1) thas not been botanized, (2) it was never covered by glaciers and thus could harbor disjunct plant species stranded by the end of the latest Ice Age, and (3) it includes the largest alpine wetland complex in Colorado.

Meet at 6:30 a.m. at Spring Creek Pass, on Highway 49 between Creede and Lake City. A large number of Forest Service campgrounds are available in the area—arrival the evening before is recommended. A list of roadside rare plant localities between Denver and Creede will be available for those who have time on Friday or Sunday to do some extra botanizing.

This will be a physically challenging trip. The trail begins with a very steep climb from Spring Creek Pass (10,900 feet) to the top of the mesa (12,250 feet) in just under two miles. To reach the wetlands at the south end of the mesa is an additional three mile hike cross-country on gently sloping alpine tundra (10+ miles round-trip). Thunderstorms are a real possibility after 11:00 a.m., and may include lightning, rain, sleet or snow. Come prepared for changing weather and a long, but rewarding day.

Useful reference materials: Baldy Cinco and Slumgullion Pass 7.5' USGS topographic maps, Rio Grande National Forest map. This is also a good opportunity to try out Sue Komarek's new book, Flora of the San Juans: A Field Guide to the Mountain Plants of Southwestern Colorado.

To register, call Janet Coles 303-866-3203 ext. 330. Note: this trip could be cancelled on short notice if the weather is inclement; call Janet for updated information as the trip date approaches.

# **UNCOMPAHGRE WILDFLOWER HIKE**

Leader: Gay Austin, U.S. Forest Service Meeting Location: See directions below Saturday & Sunday, July 22 & 23, 1995, 8:30 a.m.

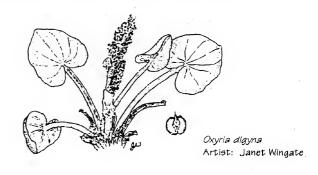
Gay Austin will lead two above-timberline hikes in the Uncompahgre Wilderness. On Saturday we will walk a moderately strenuous trail 4 miles round-trip, starting at 11,440' in elevation. On Sunday we will hike 2-3 miles up to a high alpine meadow to the southeast of Uncompahgre Mountain. The vegetation changes from a spruce-fir plant community with lush meadows of corn lily, blue bells, and Thurber fescue, to above-timberline alpine plant communities and, finally, to alpine tundra with snow willow, arctic gentians, alpine forget-me-nots, sky pilots, primrose, and others. Participants will experience a wide variety of alpine vegetation and spectacular views of Uncompahgre Peak (14,309') and other peaks over 13,000 feet.

Meet at 8:30 a.m. at the intersection of Nellie Creek Road and Engineer Pass Road. Drive about an hour (58 miles) southwest of Gunnison on Highway 149 to Lake City, then west on the Engineer Pass/Henson Creek Road approximately 5.5 miles to Nellie Creek Road (4-wheel-drive Forest Service Rd. 877).

Dispersed camp sites are available for Friday night arrivals approximately 1/2 mile west of Nellie Creek Road, then north 1 mile to Snowden Park near an old log cabin on BLM land. On Saturday night we will camp in dispersed camp sites near the Uncompangre Trailhead, which is 5 miles north of Henson Creek on Nellie Creek Road, adjacent to the Uncompangre Wilderness boundary. A 4-wheel-drive shuttle up Nellie Creek is available if requested in advance.

Plan to carry a lunch, water, and rain gear. Sturdy hiking boots and sun protection are also recommended. Nighttime temperatures are in the 30s; daytime temperatures can reach 70 to 80 degrees. Inclement weather is a real possibility. Brief excerpts on the ecology and geology of the area will be provided.

To register, call Gay Austin 303-641-6264 after 6:00 p.m. of 303-641-0471 during the day (Monday through Friday).



# CONPS Field Trip Policy

The Society wishes to remind field trip participants of the guidelines for participation in Society trips. By joining a CONPS field trip you indicate acceptance of these policies.

- 1. Plant collecting is forbidden on CONPS field trips, with two exceptions:
- (1) Collecting is permissible for scientific study (with the appropriate collecting permit, if one is required for the area in question).

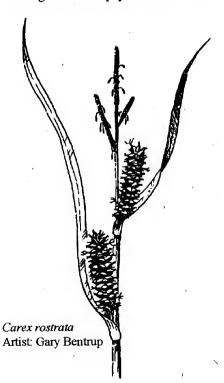
"Scientific study" means, for the purposes of this policy, study by a trained botanical scientist with an expectation that the study results will lead to published information; collected specimens will be deposited in a recognized, publicly-accessible herbarium.

(2) A trip leader or other person whose responsibility is to instruct trip participants may collect plants for immediate demonstration, explanation, or keying for full identification.

Such collecting should be done inconspicuously (so that persons not with the trip group are not offended or motivated to do likewise), and with reasoned regard for any possible effect on the plant population. However, collecting of rare, threatened, endangered or sensitive species should never be done for instructional purposes.

- 2. Rides and Cost-Sharing Policy: Car-pooling and ride-sharing are encouraged on CONPS trips. All drivers who provide rides to others will graciously accept payment from passengers according to the following scale:
  - 1 passenger (in addition to driver) 5 cents per mile
  - 2 passengers 4 cents per mile
  - 3 passengers 3 cents per mile
  - 4 passengers 2 cents per mile

Passengers should pay the driver at the conclusion of the trip, without being asked.





Pets trample plants, disturb wildlife, and annoy other trip participants. If pets must be brought along (although this is strongly discouraged), they must remain in or restrained to the owner's vehicle (i.e. walking about on a leash is NOT acceptable).

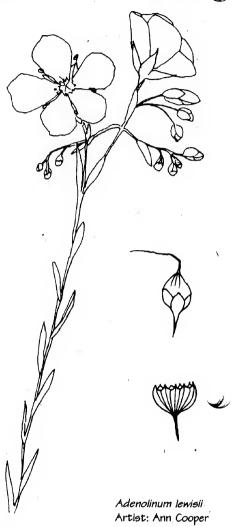
4. Field trips are designed primarily for adults, unless the trip description specifically states otherwise.

Parents should consider the appropriateness of a given trip to a child. If a child is brought, the parent assumes full responsibilty for keeping the child under strict control to prevent his/her damaging or disturbing the flora or fauna, or becoming a burden to the group. No child unaccompanied by a parent is permitted.

5. CONPS' expressed purpose is to promote appreciation and preservation of our flora. Please tread lightly.

Take care not to damage the very features you have come to see and enjoy. Ta photographs, sketches, or other means of recording the plants you see, and do not pick plants or plant parts.

6. Field trip participants MUST sign a waiver of liability.



# **Eastwood on Cañon City in 1891**

Cara Fisher, Curator of Historical Collections at the Cañon City Public Library, contributes this article from the Cañon City Record, Aug. 8, 1891 (authorship not given, but the quoted material is most likely that of Alice Eastwood. Spelling errors have been corrected).

### Flower-Flecked Facts

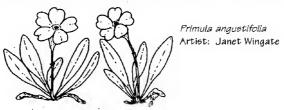
A writer from the *Rocky Mountain News* of last Sunday says a whole lot about the floral wealth of Colorado in a truthful and well written article. The following about Cañon may interest some of our readers.

There is no pleasanter botanical trip in the vicinity of Cañon City than a walk behind the bath rooms of the hot springs to the gate of the mountains, up the cañon of the Arkansas, and to the top of the Grand Cañon, a distance of about four miles. The grandeur

of the far mountain summits, covered with eternal snow, the perpendicular cliffs over 1,000 feet high, the great river boiling and dashing along its rocky channel, are sources of excitement nowhere else combined, but to anyone interested in flowers, their beauty, their abundance, and the rare species that meet you at every step, make the trip wonderfully interesting. Here among the rocks are the most northern known stations of the ferns, Pellaea wrightiana and Cheilanthes eatonii, and on the walls of the Grand Cañon, more than 1,000 feet above the river, grows the very rare Asplenium septentrionale, which the wild bighorn or mountain sheep seem to appreciate so much that it is difficult to find a specimen not bitten by them. The syringa (Philadelphus microphyllus) is growing wherever it can find a foothold, and here and there is a bunch of the rare Emory's oak [?], that like several other plants seems to have wandered in from the half-explored region of the great Colorado River of Arizona. The internal cañons are full of Fallugia paradoxa with its white flowers and plumed fruit, and where little streams of water come dashing over the rocks and losing themselves in mist the golden columbine of New Mexico grows to perfection. The scarlet penstemon, blue penstemon, the brilliant Gilia aggregata, spiraeas, castillejas, and hosts of less showy but equally interesting plants occupy every available piece of soil. The beauty of the flora is as indescribable as the grandeur of the scenery.

The abundance of the four o'clock family is noticeable. All of the Nyctaginaceae of Colorado are found about Cañon City and some of them as yet only in this part of the territory. Most of them are very interesting, and they form a very prominent feature of our flora in June and July. Abronia fragrans whitens whole acres of land, and the large, conspicuous flowers of Mirabilis multiflora are seen all over the town, opening their flowers late in the afternoon. In company with the vespertine mentzelias, they are fresh and bright during the most pleasant part of the day. The soda spring ledge, from which boils the cold mineral water, is a locality rich in rare plants. Here grow Thamnosma texana, Abutilon parviflorum, Allionia incarnata, Tricuspis acuminata [?], Mirabilis oxybaphoides and many other varieties.

The common flowers of Colorado are very abundant about Cañon City and its vicinity. The monarda grows upon the mesas; exquisite penstemons adorn the brooks; Rosa blanda [?] and the more beautiful Rosa arkansana are found on the banks of the Arkansas. Erigeron and Astragalus are numerous in species and numberless in specimens. The grass fields of Wet Mountain Valley are full of clovers, Cypripedium, Iris, and lilies. The botanist wandering through the cañons of the Sangre de Cristo range tramples down whole fields of white and blue larkspur and delicate Mertensia. The summits are covered with woolly-headed thistles, phlox, senecios, forget-me-nots, saxifrages, and the numberless beauties of the Alpine flora.



# Crassula aquatica

### William A. Weber

marshes, vernal pools, and ponds.

The only Colorado record known for the tiny semisucculent *Crassula aquatica* was Rydberg's (1906) report from twin Lakes. This was a J.T. Rothrock collection, published in the Botany of the Wheeler Expedition, p. 119, 1878, under the name *Tillaea angustifolia* Nuttall. The locality has been so much disturbed, dammed, and developed since the early days that it is not likely that the species still occurs there, if indeed it ever did. However, in preparing notes on the flora of Montezuma County, I read the account of T.S. Brandegee (1875), *The Flora of Southwestern Colorado* and found that he claims to have collected the species in the San Luis Valley, This area seems to me to be a much more likely place for it to occur. In fact, other species that he mentions for the muddy shores of the lakes of the Valley still occur there, and it is likely that this species could again be located if a concerted effort could be made to fine it. One might search for it around the San Luis Lakes or saline ponds on the west side of the valley.

The most recent description of *C. aquatica* is to be found in the *Jepson Manual: Higher Plants of California* p. 525. 1993. "Stems decumbent, later more or less erect if stranded, generally branched at the base, rooting at the lower nodes. Leaves 2-6 mm long, opposite, blanceolate to linear, the tip acute. Flowers one per leaf pair; pedicel less than 19 mm. Flowers 1-2 mm; sepals 4, 0.5-1.5 mm, ovate to oblong, the tip rounded to obtuse; petals 1-2 mm, lanceolate; style minute, spreading in fruit. Follicles erect, oblong, subtruncate. Seeds 6-17, elliptic-oblong," The habitat is said to be salt



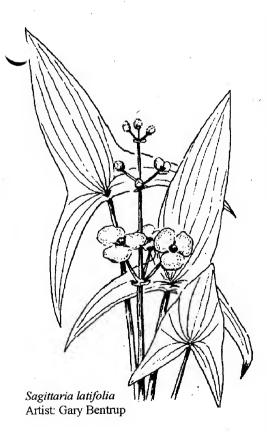
Title	Author	Price Each	Postage Each	Book Total	Postage Total
Alpine Flower Finder	J. Wingate & L. Yeatts	\$ 4.50	\$ 1.25		Total
Botany For Gardeners	B. Capon	\$ 14.50	\$ 2.00		
Catalogue of the Colorado Flora	W. A. Weber & R. C. Wittmann	\$ 36.00	\$ 2.00	· · · · · · · · · · · · · · · · · · ·	
Colorado Flora: Eastern Slope	W. A. Weber	\$ 21.00	\$ 2.00		
Colorado Flora: Western Slope	W. A. Weber	\$ 21.00	\$ 2.00		
Edible Wild Plants of the Prairie	K. Kindscher	\$ 10.50	\$ 2.00		_
Field Guide to Wildflowers of Nebraska	J. Farrar	\$ 14.50	\$ 2.00		
Flora of North America - Volume 1	Flora of North America Editorial Committee	\$ 68.00	\$ 3.00	· · · · · ·	
Flora of North America - Volume 2	Flora of North America Editorial Committee	\$ 68.00	\$3.00	· · · · · · · · · · · · · · · · · · ·	
Flora of the Great Plains	Great Plains Flora Association	\$ 40.00	\$ 3.50		
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Flora of the San Juans	S. Komarek	\$ 15.75	\$ 2.00		
The Gardener's Guide to Plant Conservation	N. T. Marshall (Published by WWF & GCA)	\$10.00	\$ 2.00		
Handbook of Rocky Mountain Plants	R. A. Nelson (revised by R. Williams)	\$ 16.00	\$ 2.00		
How to Identify Plants	H. D. Harrington & L.W. Durrell	\$ 8.00	\$ 2.00		
Intermountain Flora: Vascular Plants of the Intermo	ountain West, U.S.A. by A. Cronquist, et al.		LL		
Volume One: Geo-Botanical History/Plant	Geography/Glossary/Cryptogams/Gymnosperms	\$ 30.25	\$ 2.00		
Volume Three, Part B: Fabales	R. C. Barneby	\$ 53.60	\$ 2.00		
Volume Four: Subclass Asteridae (except Asterales)		\$ 69.00	\$ 3.50		
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Volume Six: The Monocotyledons		\$ 36.00	\$ 3.50		
Jepson Manual (Higher Plants of California)	J. C. Hickman, Editor	\$ 59.50	\$ 4.00		
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Life In An Aspen Grove (SLIDE/TAPE)	CONPS	\$ 42.00	\$ 3.50		
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Rare Plants of Colorado	CONPS	\$ 8.00	\$ 2.00		
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Rocky Mountain Flower Finder	J. L. Wingate	\$ 3.25	\$ 1.25		
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CONPS is pleased to provide a selection of books to members at discount prices. If you are interested in any of the publications listed on the preceding page contact:

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Makes checks payable to CONPS. Postage costs are additional for books received by mail. If you want to save the postage charges, you can pick the books up yourself in Denver from Velma Richards, in Boulder from Lynn Riedel, and in Fort Collins from Myrna Steinkamp.



# CHAPTER NEWS

# San Juan Chapter

June 24: Chelsea Nursery, Clifton The Western Slope's premier native plant nursery carries many hard-to-find species. Owner Stacey Stecher will show us around (970) 434-8434.

# July 22: Crag Crest Trail, Grand Mesa

This trail along the uppermost ridge of Grand Mesa offers alpine flora along with fantastic views. We might see *Corydalis caseana* on this trip! Trip Leader: Betty Hall (970) 241-5677.

For more information, call either the Trip Leader or Gretchen Van Reyper (970) 835-3268.

Plans are underway for installation of the Delta Xeriscape Demonstration Garden this spring. This 10,000-square-foot landscape will be at the entrance to Confluence Park, just off Highway 50 in Delta. Plans include a winding pathway through landscaped beds containing primarily southwestern native plants. Shrubs, perennials, a few trees, and a small area of drought-tolerant lawn will be featured. This garden will give us a great way to introduce the concept of xeriscaping and uses of native plants in landscaping. Anyone wishing to become involved in this CONPS sponsored project can contact:

Gretchen Van Reyper 2126 L75 Lane Austin, CO 81410 (970) 835-3268

# Fort Collins Chapter

Monthly meetings are held at 7:00 p.m. in the Large Conference Room at the Headquarters for the Rocky Mountain Station/Arapaho-Roosevelt National Forest, 240 West Prospect, unless otherwise noted. For more information call Michael Scott at 226-9475 or 490-1788. Newcomers are welcome!

# **Southwest Chapter**

July 15: Vallecito Creek Plant Walk Sue Komarek and Sandy Friedley will take us through the plant communities of Vallecito Creek. Meet at 9:00 a.m. at the Vallecito Creek trailhead.

August 5: Wolf Creek Pass Plant Walk Dick Moseley and Charlie King will lead us through some of the high subalpine and alpine plant communities above Wolf Creek Pass. Meet at 9:30 a.m. at the FINA gas station near the intersection of Highway 160 and Piedra Road west of Pagosa Springs.

For more information, call:

Leslie Stewart (970) 882-7241 Dolores/Cortez Sandy Friedley (970) 884-9245 Bayfield/Durango Sara Brinton (970) 264-2268 Pagosa

All activities are listed in the Public Announcements section of local papers the week before the activity. Check for any changes in meeting place or time.

# **Boulder Chapter**

Monthly meetings are held from September through April on the 2nd Tuesday of the month at 7:30 p.m. at the Foothills Nature Center, 4201 North Broadway, unless otherwise noted. For more information call Lynn Riedel (666-6687) or Elaine Hill (494-7873). Check the Daily Camera or the Colorado Daily for changes. Bring a friend!

# **Metro-Denver Chapter**

Monthly meetings are held from September through May on the 4th Wednesday of the month at 7:30 p.m. at the Denver Botanic Garden (DBG) Morrison Center or Classroom A, 909 York Street, unless otherwise noted. For more information, call Jeff Dawson (303) 722-6758.

# CALENDAR OVERVIEW

# 1995 FIELD TRIPS

Jun 24 High Plains Riparian Plant Communities

Chelsea Nursery, Clifton San Juan Chapter Jun 24

Jul 8-9 Square Top & Silver Dollar Lakes

**Jul 15** Phantom Canyon Preserve

**Jul 15 Snow Mesa** 

**Jul 15** Vallecito Creek Plant Walk

Southwest Chapter

Elk Park Wetland **Jul 22** 

Crag Crest Trail, Grand Mesa **Jul 22** 

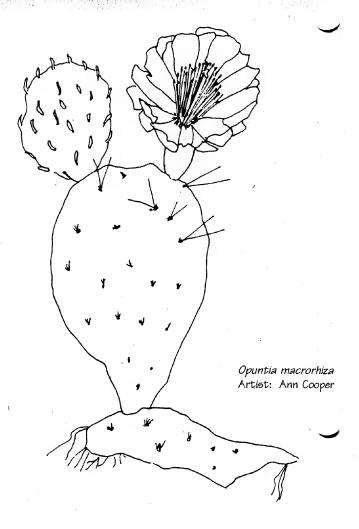
San Juan Chapter

Uncompangre Wildflower Hike Jul 22-23

Wolf Creek Pass Plant Walk Southwest Chapter Aug 5

Purgatory Canyon Dinosaur Trackway Sep 2-3

& Bent's Fort





**Colorado Native Plant Society** P.O. Box 200 Fort Collins, Colorado 80522

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